Lockheed Martin
Scientific Engineering, Response and Analytical Services
2890 Woodbridge Avenue Building 209
Edison, NJ 08837-3679
Telephone 732-321-4200 Facsimile 732-494-4021

DATE: March 21, 2012

TO: Kelley Chase, EPA Region 3 OSC
Cynthia Caporale, EPA Region 3 OASQA

THROUGH: Ex. 4 - CBI SERAS Program Manager

FROM: Ex. 4 - CBI, SERAS QA/QC Officer

SUBJECT: VERIFICATION/COMPLETENESS CHECK – DIMOCK, PA LABORATORY DATA
File 1202003 FINAL PART 3 of 3 R33907 03 14 12 1314.pdf
File 1202004 FINAL PART 3 of 3 R33907 03 19 12 1254.pdf

INTRODUCTION

On March 20, 2012, a review of the case narratives and corresponding certificates of analysis from the EPA R3 (WO1202003 PART 3 Posted Mar 15 and WO1202004 PART 3 Posted Mar 19) was conducted at the SERAS facility in accordance with the Follow-Up Verification/Completeness Check agreed upon during our teleconference on Wednesday 2/8/12.

The assumptions for this review include the following: 1) Case narratives from the Regional labs and/or subcontract labs have been reviewed in accordance with Regional or Environmental Services Assessment Team (ESAT) protocols and contain all pertinent and complete information to conduct the completeness check. SERAS will base this review on the information provided by the laboratory and not on an actual data package; and 2) SERAS will relay any "red" flags to the EPA R3 personnel to resolve and determine data usability.

OBSERVATIONS

In accordance with Table 1 – Field and QC Sampling Summary (Rev01 - 2/3/12), Table 2 – Sample Analytical Requirements Summary (Rev01 – 2/3/12), Methods for Groundwater and Surface Water Samples and the R3 SOPs R3QA108-110811 (anions by IC), R3QA163-110811 (oil & grease), R3QA131-080311 (total mercury), Method 365.4 (total phosphorous), Method 353.2 using flow injection (nitrate/nitrite as nitrogen), R3QA105-110811 (total dissolved solids), Method 353.2 using flow injection (total nitrogen) and R3QA106-110311 (total suspended solids), the following observations were noted and need to be clarified/resolved.

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1. The method blank for TDS exceeded the RL at 20 mg/L. The following qualifiers are recommended for the TDS analysis based on the results of the method: Elevate the RL to 20 mg/L for samples HW45, HW45-P, HW43-P, HW43, EB02, HW15a-P, HW31-P, HW30, HW30-P, HW31, FB11, HW31z, HW15a, HW38-P, FB13, FB12, Hw47, Hw51, HW38, HW51-P and HW47-P. For all samples listed above with the exception of EB02 and FB11, enter a "J" flag in the result qualifier column. This is due to the sample results being within 10 times the RL (between 20 and 200 mg/L).
2. For total nitrogen, the MS recovery for sample HW15a-P (lab #1202003-13) exceeded the 85-115% criterion. Since it cannot be ascertained if all the samples in the batch are sufficiently similar, this reviewer agrees with the "J" flag assigned by the laboratory. A "UJ" flag needs to be entered into the result qualifier column.
3. For oil and grease analyzed under batch BB22801, the LCS, MRL check and the MS recovery for sample HW30-P (lab #1202003-16) were all below the respective acceptance criteria. This reviewer agrees with the lab qualifier of "UJ". Non-detect results for HW45, HW45-P, HW43-P, HW43, EB02, HW15a-P, HW31-P, HW30, HW30-P and HW31 should be flagged "UJ" in the result qualifier column.

4. It is assumed that all required instrument QC in the method was run and was within the criteria listed in the EPA R3 SOPs since this information is not available in the laboratory report.

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1. The field blanks from 2/8/12 (FB13) and 2/9/12 (FB14) had TDS results of 154 and 60 mg/L over the 10 mg/L RL. Since inorganic data are not typically qualified non-detects "U" based on field blank results, results for samples collected on 2/8/12 and 2/9/12 should be qualified estimated "J". A "J" qualifier should be entered into the result qualifier column in Scribe for samples HW48, HW48z, HW21, HW21z, HW23-P, HW22, HW23, HW22-P, HW49, HW44 and HW49-P.
2. For total nitrogen, the MS recovery for sample HW44 (lab #1202004-28) exceeded the 85-115% criterion. Since it cannot be ascertained if all the samples in the batch are sufficiently similar, this reviewer agrees with the "J" flag assigned by the laboratory. A "J" flag needs to be entered into the result qualifier column.
3. For total phosphorous, the MS recovery for sample HW36n (lab #1202004-21) exceeded the 69.9-121.9% criterion. Since it cannot be ascertained if all the samples in the batch are sufficiently similar, this reviewer agrees with the "J" flag assigned by the laboratory. A "UJ" flag needs to be entered into the result qualifier column.
4. For oil and grease analyzed under batch BC20101, the LCS, MRL check and the MS recovery for sample HW-22 (lab #1202003-13) were all below the respective acceptance criteria. Likewise for batch BC20701, the MRL check was below the criterion of 60-140%. This reviewer agrees with the lab qualifier of "UJ" for both batches. Non-detect results for HW48, HW48z, HW21, HW21z, HW23-P, HW22, HW23, HW22-P, HW36n, HW49, HW16-P, HW54-P, FB14, HW16Z, HW16, HW44, HW49-P, HW36n, FB15 and HW54 should be flagged "UJ" in the result qualifier column.
5. It is assumed that all required instrument QC in the method was run and was within the criteria listed in the EPA R3 SOPs since this information is not available in the laboratory report.

cc: Ex. 4 - CBI SERAS Project Officer
John Gilbert, ERT WAM
Gary Newhart, ERT WAM
Ex. 4 - CBI SERAS Task Leader